Institute for Federal Printing & Electronic Publishing

U.S. Government Printing Office

Printing & Electronic Publishing Training for the Federal Government

The following "Printing Procurement Glossary" is from the Institute's class:
"Getting the Best out of Desktop Publishing."

Information regarding this class (description, dates, cost, etc.) can be found at:

http://www.gpo.gov/ifpephome/index.html

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Desktop Publishing Glossary and Tips

- The following glossary defines desktop publishing (DTP) terms and some printing terms used in the Institute's DTP seminar.
- These definitions are presented for informational purposes only and are not contractual definitions.

➤ This arrow points to a DTP tip.

8, 16, 24, 32, Bit Graphic or Scan — *See Bit Depth.*

.EPS — The file name extension for an encapsulated PostScript file on the IBM PC or clone platform. *See also* Encapsulated PostScript.

.FOT — The file name extension for a file related to a TrueType font on the IBM PC or clone platform. *See also* FOT File.

.PFB — The file name extension for a file related to a PostScript font on the IBM PC or clone platform. *See also* PFB File.

.PFM — The file name extension for a file related to a PostScript font on the IBM PC or clone platform. *See also* PFM File.

.PRN — The file name extension for a file that has been printed to disk on the IBM PC or clone platform. *See also* Print-to-Disk File.

.TIF — *See* Tagged Image File Format.

.TTF — The file name extension for a file related to a TrueType font on the IBM PC or clone platform. *See also* TTF File.

A

Addition — In computerized page layout, a small third-party add-on program to the PageMaker page layout program—known as a XTension for QuarkXpress and as a plug-in for Photoshop or Illustrator.

Additive Primary Colors — Red, green, and blue used for transmitted light as in a computer monitor. *See also* Subtractive Primary Colors.

Adobe Type Manager™ (ATM) — A computer program that automatically scales fonts for the computer screen as they are needed and thus provides a greater variety of sizes and eliminates jagged edges on the fonts shown on the monitor.

The version of ATM current of 1/98 is ATM Deluxe.

→ ATM or similar programs are recommended for DTP producers. They provide exact font size and page layout on the screen, thereby matching the word-wrap and page layout provided later by a high-end imagesetter, and thus avoid output surprises, additional expenses, and delays

Adobe Acrobat — A program from the Adobe Corporation that can be used to view files of formatted pages from page layout programs (e.g., from QuarkXPress or PageMaker) on computers that do not have these programs, nor even the fonts required—even across platforms.

PDF files from Acrobat can be directly used as input by some imagesetters.

Alpha Channel The top eight bits in a 32-bit color scan, which can be used to describe the image's opacity.

Application A computer program written to meet a specific user purpose (i.e., accounting or DTP) as opposed to a program written to “run” a computer function.

APR *See* Automatic Picture Replacement.

Approval™ An Eastman Kodak Company-color process, laminated, halftone, digital proof.

➤ This proofing system can not use files in PostScript format. It requires files in CEPS File format.

Archived File A file that has been stored and often times also compressed. *See also* Compression and *also* Self-Extracting Archive.

ASCII An acronym for American Standard Code for Information Interchange, a standard code for representing data. *See also* File Format.

ASCII format does not contain paragraph or other formatting information.

ATM™ *See* Adobe Type Manager.

Automatic Picture Replacement (APR) A process in a Color Electronic Prepress System (CEPS) used to replace a low-resolution graphics file by a high-resolution image. *See also* OPI.

A high-resolution scan is made in the CEPS, then a low-resolution version is provided by the CEPS for the desktop system, where it can be scaled, rotated, cropped and placed in the electronic mechanical. When the electronic mechanical comes to the CEPS system for film output, the manipulated, low-resolution image is then replaced by a similarly scaled, cropped, rotated, high-resolution image.

→ Image manipulation other than cropping, rotating, and scaling done on the low-resolution file in the DTP environment (color correction, image combining, etc.) will not be automatically done in the CEPS and should be discussed ahead of time with the service provider.

Auto Tracing The process of tracing a bitmapped graphic into a vector format to allow for size changes. *See also* Bezier Curve.

→ If an auto traced graphic has too many anchor points and will not printout on a laser printer, it most likely will not output successfully on an imagesetter. One way to solve this is to lessen the number of line segments used by adjusting the “flatness setting” in the tracing program or in an image-editing program.

B

Banding An undesired, visible, stepped-changes in image density, in a desired smooth tint gradient. Also known as stair stepping. *See also* Graduated Screen.

Bezier Curve A type of curve used to draw objects in an object-oriented program; its shape is defined by anchor points set along an arc. *See also* Object Oriented Graphics.

Bit An acronym for binary digit. This smallest unit of information is defined by an on or off condition.

Bit Depth The number of units of digital information (binary digits) in each pixel.

Eight-bit color can record 256 grey or color values; 24-bit color can record 16.8 million colors.

Bit Map An image made using a grid of dots (pixels). Also known as paint or raster format. *See also* Vector Graphics.

Bit Map Scan An image that has been read and digitized into color and density values for each spot in the image (a bitmap). This type of image is in contrast to a digitized image that is in drawing instruction (vector) form. *See also* Bit Map.

Bitmapped Font A pattern of dots that describes a letter or number. A separate pattern is required for each size of the letter or number as opposed to outline fonts that can be changed in size as needed. *See also* Outline Font and *also* Scalable Font.

Bitmapped Graphic — An image made using a grid of pixels. Also known as paint format or raster graphic. *See also* Object Oriented Graphics.

→ A bitmapped image has a fixed resolution; therefore enlarging the graphic causes it to become coarser.

Bleed — In printing, ink that extends to the edge of the page after trimming.

Blend — 1) A graphic that contains two or more merging colors whose densities may or may not vary as the colors merge.

2) Used by some people as an alternate term for graduated tint screen, thus including single-color graduated blends.

→ The trick in gradient blends is to produce gradients that vary gradually, without visible stair stepping of different density blocks. *See also* Banding, Calculated Blend and *also* Formulated Blend.

Built Color — A color made by using screen tints of two or more process colors (CMYK). For example, green using dots of yellow and cyan (process blue). *See also* Pantone Color and *also* Spot Color.

Many spot colors cannot be accurately reproduced as built colors. If a spot color must be reproduced very closely when using process inks, a fifth color (the spot color) may be required along with the four process inks.

Butt Fit — The registration of two images of different colors against each other without any overlap. *See also* Choke and *also* Trapping.

C

Calculated Blend — A graduated screen of one or more colors created from a series of objects (e.g., lines or rectangles) in a set number of steps, creating a predictable blended effect. *See also* Banding.

→ The number of steps in a calculated blend should not exceed 256.

Calibration — The operation of testing, measuring, and adjusting equipment to a standard or for two or more pieces of equipment, to each other.

→ DTP color management requires that scanners, monitors, and output devices be calibrated regularly.

Capstan-Drive — A means of moving paper or film in an imagesetter by pulling the media with a geared cylinder (the capstan).

In older capstan-driven imagesetters the film or paper and the exposing light both move at the time of exposure, thus image placement and registration are not as precise as with drum based imagesetters, where the stationary film is wrapped around (or placed in) a drum and only the light moves.

Cast Correction — Correcting an image for an overall color.

CEPS — *See* Color Electronic Prepress System.

Choke — In negative preparation, the technique of slightly shrinking an image to provide for the slight image overlap needed in trapping different colors that touch each other. *See also* Spread and Trapping.

Chokes and Spreads — In traditional image assembly, images that have been made thinner (chokes) or fatter (spreads) through the use of a camera or film contacting process.
This process (trapping) is done without changing image-shape or position in order to provide a slight printing overlap between abutting different colored images. Also known as skinnies and fatties. *See also* Trapping.

→ Some page layout programs contain rudimentary trapping capabilities. However, trapping is dependent on a number of printing company variables, including, paper, press, and company preference. Therefore, when supplying electronic mechanicals, it is recommended that trapping be left to the printer.

CIE Model A system of defining color established by the Commission Internationale de l'Eclairaige (CIE). In this system a color is defined by describing its hue, lightness, and saturation. *See also* Color Model.

Clipping Path A digital mask made to silhouette an image for editing. *See also* Bezier Curve.

CMYK An acronym for the subtractive primary colors, C (cyan—process blue), M (magenta—process red), Y (yellow), and K (black—printers use K for black to keep from confusing it with B for blue) used in process color printing to simulate full color as the human eye sees it. *See also* RGB and *also* Spot Color.

Collect For Output™ A utility in QuarkXPress that collects document and graphic files and provides reports on the fonts, files, and trapping used in a project.

→ A Collect for Output report will assist in completing GPO's Disk Information Form (GPO Form 952).

Color Breaks 1) Indications on camera-ready copy or visuals accompanying an electronic mechanical that specify which image prints in which color. *See also* Color Separation.

2) The hard copy visuals of a DTP project where each color is on a separate page. Also known as color-split proofs.

→ Providing a visual broken into separate pages for each color, along with the electronic mechanical, will help to obtain your desired results. It will provide specification writers information to write better specifications, and assist the printer in checking the film from your electronic mechanical.

Color Key™ A Du Pont Brand overlay proof.

Available in the process colors and in several generic flat colors (red, blue, green, etc.)

→ Generic colored overlay proofs should be marked to show the precise color they would print to avoid unfulfilled customer expectations.

Color Electronic Prepress System (CEP) High-end, usually proprietary, hardware and software designed for image assembly, color correction, retouching, color separation, and output. Examples include Scitex and Crossfield brand systems.

Color Gamut The range of colors available to the system being used. *See also* Bit Depth, *also* Color Management System, and *also* Color Model.

→ Differences in color gamut from monitor through other systems and materials to the ink on the press are the reason a DTP monitor is not WYSIWYG.

Color Management System Hardware and software to administer a method of coordinating color matching issues such as differences in color gamut between the hardware and software used from scanning, through page layout, and proofing to press. *See also* Calibration.

Color Model A way to define color such as the printer's CMYK (cyan, magenta, yellow, and black) or the monitor's RGB (red, green, and blue) or some DTP program's HSV (hue, saturation, and value). *See also* Color Gamut.

→ Converting from one color system to another (RGB to CMYK) is one of the limitations in DTP that must be kept in mind when using DTP to produce publications that will print in process color.

Color Separation 1) In process color prepress, the process of breaking full color originals into their C (cyan), M (magenta),
Y (yellow), and K (black) components. *See also* Separations.

2) In artwork preparation, the process of breaking the physical artwork or files for spot or built process colors, into separate components according to ink color.

Color Space A three-dimensional model used to define color. Also known as color gamut. *See also* Color Model.

Color-Split Proof A separate visual for each color in the product to be printed.

Composite Proof One visual showing all elements and colors in the product.

Compression A means to reduce file size to allow quicker data handling, easier storage and faster data transfer. *See also* JPEG and *also* Self-Extracting Archive.

→ Files compressed with the DOS command “Backup” must be decompressed with the exact version that they were compressed with (e.g., 3.1a). Submitting DTP projects compressed this way may cause extra expense and delay if that exact version is not current and readily available to the contractor (most other compression software is backwards compatible). Therefore, it is recommended that readily available, backward compatible, compression programs be used to compress DTP projects, and that files be compressed into a self-extracting archive.

Concept Proof A visual (usually made by the designer) as a mock-up of the final printed product. *See also* Contract Proof.

Concept proofs are often made from digital information and often are made on wax thermal or similar systems that are not true indicators of the color and sharpness of the final product.

→ Marking concept proofs to show that they are not a good indication of the color to be printed (or attaching an ink chip for spot colors) can avoid undue client expectations.

Continuous Tone An image that actually contains gradient tones. *See also* Line Art.

For example; a photoprint with actual tones from white through grey to black, as opposed to a halftone made of dots of black to simulate tonality.

Contract Proof A proof made as a true indicator of the final printed product–in essence, a contract. Contract proofs are usually made from the negatives to be used for printing but may be made from digital information or even printing plates. *See also* Concept Proof.

Corel Draw™ An object oriented drawing program for IBM PCs and compatible computers.

Chromatin™ A DuPont Company brand name for a laminated proof commonly used as a contract proof.

Cyan One of the four colors used in process color printing to simulate all colors. Cyan reflects blue and green light. Also known as process blue. *See also* CMYK.

D

DCS File An abbreviation for desktop color separation. A process color-separated graphics file format containing 5 parts, CMYK and a low-resolution master file for viewing/proofing.

Decompression The process of expanding a file that has been compacted. *See also* Compression.

Densitometer A device used to measure light reflectance or transmission.

In DTP, densitometers are used for monitor calibration, checking negative or positive image density, and press-sheet ink density.

Desktop Publishing (DTP) The use of a desktop computer, using off-the-shelf software, to do typesetting and page layout in order to produce composed pages (in-place text and graphics), with output to an image setting device (paper or film).

DTP files may also be transferred to a Color Electronic Prepress System (CEPS) for further image manipulation or prepress work.

Desktop Publishing Disk Information Form
GPO Form 952. A form used to supply information to GPO regarding the programs used, files submitted, and output requested for DTP projects. This form is used to accompany individual orders (SF-1's), term contract requests, and term contract print orders (GPO Forms 2511).

Directory
In the MS-DOS, Windows, OS/2, and UNIX operating systems, a hierarchical organization of files (similar to folders in the MAC world).

Dithered Image
An image made by changing the values of alternating dots or pixels in a digitized image to create the effect of additional tones or colors through visual illusion.

Document File
A file in the format of the program in which it was produced as opposed to being in a “universal” file format such as PostScript. Also known as native format. DTP projects submitted in document file format (rather than PostScript format) can be corrected or changed by the contractor.

→ Submitting files in document format will facilitate corrections or changes.

Dot
1) In offset printing, the smallest unit of ink printed for a screened image.

For offset printing, dots are measured in lines per inch (LPI). The LPI used (line screen value) varies according to the type of paper (newsprint, coated, etc.) and the method of reproduction (screen printing, sheet-fed offset, web offset, etc.) For sheet-fed offset, typical LPI's used are 133 to 175. If a halftone is produced electronically, each halftone dot will be made up of “laser dots.” Also known as halftone dot.

2) In digital imaging, the smallest unit that can be scanned, displayed, or output.

Typical dots per inch (DPI) range from 300 to 2400. Also known as laser dot. *See also* Resolution.

Dot Gain
The spreading of the dots used in printing, that naturally occurs from copy to film, film to plate, and plate to paper.

Dot growth can cause screens and images to appear darker and can change process colors.

→ Dot gain must be kept in mind when choosing a line screen (e.g. 133, 150 or 175) for scanning or for tint screens.

Dots-Per-Inch (DPI)
1) In desktop production terms, a measure of the resolution of an image on a Monitor, or more typically, on the output page.

A Macintosh screen is 72 dpi, a typical laser printer is 300 or 600 dpi, and a photo imagesetter is typically 1200 to 2400 dpi. *See also* Resolution.

2) In printing terms, *See also* Dot.

Downloadable Font
A font that is sent from the computer to the printer before use, in contrast to a font that is permanently stored in the computer.

DPI
See Dots Per Inch.

Draw/Illustration Program
A computer program that produces object oriented graphics; an example is Aldus Freehand. *See also* Paint Program.

Driver File
Software that tells a computer how to communicate with a piece of hardware such as a printer.

DTP
See Desktop Publishing.

Dye Sublimation Printer
A printing process used in DTP printers where temperature controls the amount of colorant vaporized from a ribbon and placed on the paper. *See also* Laser Printer and *also* Wax Thermal Printer.
Dye sublimation halftone proofs are near continuos tone.

E

Electronic Design
The use of computers and the other elements of desktop publishing to design publications in contrast to the traditional use of pen or pencil directly on paper.

Electronic Mechanical
One or more electronic files containing the elements required (type, illustrations, and design) to produce the paper or film output needed as a publication-master. This term is in contrast to a paste-up of type, illustrations, and design elements made for the printer's camera (the mechanical).

Electronic Prepress System
See Color Electronic Prepress System.

Embedded Graphics
Graphics produced in one program and then placed into another program. Also known as nested graphics. *See also* Linked Graphics.

→ When embedded graphics are placed in a page layout program, automatic trapping programs applied to the page layout file may not be able to work within the graphic. Furthermore, the contractor may not be able to make any changes or corrections in the embedded graphic. Therefore, it is suggested that a copy of the graphic in native format also be supplied along with the electronic mechanical.

Encapsulated PostScript™ (EPS)
A file format for graphics in which a graphic is described in terms of the PostScript page description language.

EPS files may contain bitmapped or object oriented graphics, and may contain a low-resolution bit-mapped image of the file to be used for screen viewing only. EPS files can contain embedded special information such as: spot colors, clipping paths, line screen values, and transfer functions.

→ EPS files of graphics (without the native format built-in) cannot easily be corrected or changed by the contractor. Therefore, it is suggested that a copy of the graphic in native format also be supplied.

EPS
See Encapsulated PostScript.

EPSF
Encapsulated PostScript File. *See* Encapsulated PostScript.

Extension
1) In general computing, *See* File Extension.

2) In DTP, (spelled XTension) a small program made by another company as an add-on to QuarkXPress—known as a plug-in for Photoshop or Illustrator or as an Addition for PageMaker.

F

Fatties
See Spread.

File Extension
A three-letter suffix to a file name in the DOS operating system. The extension separated from the file name by a dot—the period is expressed orally as “dot” —describes the type of file (e.g., .doc for a document file and .exe for an executable file.)

File Format
The manner in which digital information is stored by a program, including codes for character representation, text style, and image description. *See also* Image File Format.

Many programs use their own way of storing data or graphics (their native file format), but are also able to input or output text or graphics in selected other generic or common formats. For text. ASCII is a generic format that contains text only, not formatting. For graphics, there are many common formats, including two that are used most often for DTP, TIFF for bitmapped graphics and EPS for vector graphics.

Not all common graphic file formats are suitable for DTP; e.g., PICT is a low-resolution format designed for monitors. Numerous presentation graphic file formats are also not suitable for DTP output.

Film Recorder A device used to produce an image on film from digital information. Film recorders are used most often for continuous tone images in full color (e.g., photographic transparencies and overhead transparencies.)

Flatness Setting A setting in some graphics programs to change the number of line segments to draw a curve for an object oriented graphic. *See also* Bezier Curve and *also* Object Oriented Graphic.

Folder In the MAC world, a hierarchical filing system generally similar to directories and sub-directories in the DOS operating system.

Font Traditionally a complete collection of characters in one typeface and size, including all letters, figures symbols, and punctuation marks. However, PostScript fonts are scalable and include many sizes. *See also* Bitmapped Font and *also* Outline Font.

→ City-named fonts, such as New York and Geneva, (generally supplied with the System for MACs) are available basically as TrueType or bitmapped fonts and thus are generally not used for professional typesetting that will be output on an imagesetter.

Font Id A method of identifying fonts between devices (e.g., from computer to computer or computer to imagesetter).

This system was set up to supply unique font identifying numbers from a block of numbers assigned to specific manufacturers by the Adobe Corporation. In the past, for various reasons, this system often caused font ID conflicts (outputting the wrong font).

→ Use a font management utility, and do not change the names or numbers of fonts in your computer without experience in font manipulation.

Font Metrics File A file that contains the width and height information for each character in a font.

In the MAC world, font metrics are contained in the screen font file. In the IBM and PC clone world, for PostScript fonts, the font metrics are contained in the PFM file, and for TrueType fonts are stored in the font file itself. *See also* PFM File.

→ Sending the proper font files as part of an electronic mechanical will assist in keeping undesired word wrapping and other font surprises from showing up in imagesetter file output.

Font Set A group of typefaces used for one program or project.

For Position Only (FPO) A copy of an illustration used in the mechanical to show position, size, and cropping. FPO's are not intended to be used as original copy for reproduction.

Form 952 *See* Desktop Publishing – Disk Information Form.

Formulated Blend *See* Calculated Blend.

FOT File A “hinting” file for a TrueType font on an IBM PC or clone computer that assists the respective font to achieve proper screen or printer output. *See also* TTF File.

→ For each TrueType font used in a DTP project TTF and FOT files are needed as part of the electronic mechanical for proper font output. TTF and FOT files are usually stored in the Windows/system subdirectory.

FPO *See* For Position Only.

FrameMaker™ A popular page layout program from Adobe.

Freehand™ A macromedia computer graphics program that produces vector graphics.

Freehand File An electronic file produced in the Freehand drawing program.

→ When supplying Freehand files, from version 3.2 or less, be sure to supply both the original Freehand file and the exported EPS file.

G

Gains — *See* Dot Gain.

Gap — In typesetting, an unwanted space between words. *See also* Lake and *also* River.

GCR — *See* Gray Component Replacement.

GIF — *See* Graphics Interchange Format.

GPO Form No. 952 — *See* Desktop Publishing – Disk Information Form.

Gradation — A desired smooth blending between tints of different percentages as seen, for example, in a properly made graduated tint. *See also* Banding.

Gradient Blend — A graduated screen of two or more colors.

Graduated Fill — The gradual change in density or color of the contents of a graphics shape. *See also* Banding and *also* Blend.

Graduated Screen — A tint screen that gradually changes tones from one density to another. Also known as a graduated tint. *See also* Banding.

Graphics Interchange Format (GIF) — A compressed graphics file format used to upload, download, and store graphics sent via modem to and from on-line services.
This format developed by CompuServe is not recognized by many graphic software programs.

Grey Component Replacement (GCR) — The substitution of a black (grey) image in long run, four-color process printing to replace equal amounts of cyan, magenta, and yellow inks. *See also* Under Color Removal.

→ GCR saves money on ink, provides quicker drying, and leads to improved detail. The percentage of GCR used for similar originals will depend on the printing company and their equipment as well as other factors.

GCR and under color removal should not be attempted during DTP without complete understanding of these techniques and discussion with GPO or the printer.

Grayscale — 1) For scanners and video monitors, the reproduction of gray tones by varying the on and off condition (black or white) of some of the bits in a pixel. Two-bit graphics show 4 gray shades, and 8 bit graphics show 256 levels of gray. *See also* Bit Depth.

2) In some scanning software a setting in the software that produces only a low quality image. *See also* Halftone Mode.

H

Hairline Rule — A fine line the thickness of a human hair. Different organizations and groups define it differently: The U.S. Postal Service as 1/2 a point; GATF as 3/1,000 inch; some printers and designers as 1/100 inch.

➤ In many DTP programs the hairline rule default setting produces a line that is set so fine that while it is visible on a laser printer it is almost invisible on final output from a higher resolution device. Therefore, for hairlines a minimum rule thickness of .25 point, rather than the default setting is recommended.

Halftone — The reproduction of a continuous tone image through the use of dots of equal density but varying size, to simulate the tonality of the original.

➤ DTP users who scan halftones for inclusion in electronic mechanicals as live copy should become aware of, and proficient in, adjusting tone compression and the other variables that need to be adjusted to make digital halftones print well.

Halftone Dot — *See* Dot *and see* Laser Dot.

Halftone Mode — A user selectable operating manner of a scanner that produces low quality prescreened monochrome images suitable for video display or dot matrix printing, but not suitable for professional imagesetting.

➤ The “halftone mode” on scanners that produces prescreened low quality monochrome images should not be used for scanning photographs for offset printing.

Halftone Scanner — An electronic device used to convert a continuos tone image (photographic print or illustration) into a digital image. *See also* Resolution *and also* Scanning.

Hard Copy — A printed version of information submitted electronically. *See also* Concept Proof and *see also* Visual.

Hard Drive — A computer device for storing and retrieving data on a rigid magnetic platter, in contrast to a drive which uses flexible (floppy) magnetic media.
Many DTP systems are configured with hard drives that use removable hard disks upon which projects of considerable size can be easily transferred.

Hard Mechanical — Composed and pasted-up text and graphics material submitted for printing in a camera-ready state. Also known as camera-ready art. *See also* Electronic Mechanical.

Hardware — Equipment (computers, monitors, etc.) as compared to software (operating or application programs).

Harvard Graphics™ — A text and graphics program for business presentation composition and layout (monitor or screen use) rather than print production. *See also* Presentation Graphics.

High-End Prepress Link — A means to connect a DTP system with a color electronic prepress system (CEPS) in order to have each perform the operations it does best.
The DTP system would perform text input, editing, design, typesetting, and page makeup, then the CEPS System would electronically provide the required prepress functions of high-resolution color separation, image editing/manipulation, and image assembly.

High-End System — A high-quality, high-resolution, DTP, scanning, CEPS, or other system. *See also* Low-End System.

High Res — *See* High-Resolution.

High-Resolution — An image output intended for offset printing, typically any resolution above 300 DPI. *See also* Low-Resolution.

High-Resolution Image File — An electronic file of an image that has a large number of dots or pixels in order to provide a smooth appearance for text and graphics. *See also* Resolution.

Highlight — The lightest area with detail in a halftone.

➤ In order to print well, highlights in photographs and other continuous tone images scanned on a desktop scanner should be set between a 0% and 10% dot in an image-editing program such as Photoshop.

Hinting — In displaying screen fonts, a means of adjusting fonts to overcome screen limitations and appear at the correct font size and shape.

Holographic Image — An image on film that appears to be three-dimensional.
A holograph is produced by using a laser to emboss multiple images which are precisely placed over each other.

I

Illustration Program — A graphics program that produces object oriented graphics. Also known as a drawing program. *See also* Paint Program.
Examples are Illustrator and Freehand.

Illustrator™ — An Adobe Corporation graphics program that produces object oriented graphics.

Illustrator File — An electronic file in the default file format of the Illustrator drawing program.

Image Assembly

The process of placing formatted pages and other images in place for reproduction by a press, including color breaks and registration. Also known as stripping. *See also* Imposition.

Image assembly traditionally was done with film negatives, by knife and tape onto carrier sheets known as flats. While much of the DTP-produced, imagesetter-output, page and graphics films are still traditionally stripped, more and more digital files are assembled into press size flats on the computer and then output as assembled film, ready for plate making.

Image Editing Program

Programs made to adjust, combine, retouch, or otherwise change, bitmapped (often scanned) graphics. Also known as image manipulation or image processing programs. Examples include Adobe Photoshop and Aldus Photostyler, Color Studio, and Canvas.

Image File Format

The form of coding used to represent an image in an electronic file.
Unlike text, various DTP programs use numerous different formats for graphics. *See also* GIF, Document File Format, PostScript, and *see also* TIFF.

Image Manipulatzion Program

See Image Editing Program.

Imagesetter

The device that exposes the image onto the paper or film. The imagesetter receives its information from the raster image processor (RIP), which converts the computer's page description language into information usable by the imagesetter (a bitmapped image).

Imbedded Commands

In word processing, the placement of composition instructions within the copy.

Imported Graphic

A graphic that has been produced in, or scanned into, one program and then transferred into another graphics or page layout program. *See also* Embedded Graphics and *see also* Linked Graphics.

➤ When collecting fonts for inclusion with electronic mechanicals, be sure to include the fonts used in any imported graphics. Unfortunately numerous page layout program reports do not list the fonts for imported graphics and thus do not collect these fonts or remind you to collect them.

Imposition

1) (verb) The process of placing pages or other forms in the position that they will print on the press so that they will be in the desired sequence and position after printing and folding. *See also* Image Assembly.
2) (noun) The plan for placing pages during image assembly.

Input Resolution

For DPI, the number of dots per inch (DPI) used in scanning, designing, or otherwise electronically recording or creating the image (e.g. 300, 600, 2400, DPI). *See also* Resolution, *see also* Output Resolution, and *see also* Scanning.

➤ It is a popular misconception that the input resolution for scanning must equal the output resolution. For continuous tone originals, scanning resolution beyond twice the line screen to be used in printing is most often unnecessary and counterproductive.

Interpolation

In scanning and decompression of images, the process of examining adjoining data in graphics and inserting an estimated value for the image missing between known image values (purposefully removed during scanning or compression). *See also* Resampling.

J

Jaggy Lines

Lines with a ragged (stair stepped) edge as seen in curved characters or design elements at low-resolution output (300 DPI). *See also* Resolution.

JPEG A graphic image file compression format designed by the Joint Photographic Experts Group. *See also* Compression and *see also* Interpolation.

➤ Some varieties of JPEG use lossey compression, which samples every nth pixel (disregarding the balance) and then at decompression, interpolates to fill in for the lost data. This type of compression may not be suitable for highly detailed graphics.

Justified Type In composition, a line of characters that has been spaced out to the full width of the column.

K

Kerning In typesetting, the adjusting of space between specific pairs of adjacent characters. *See also* Tracking.

Keylines 1) Holding lines drawn on camera-ready copy to indicate the placement of halftones or other copy that is to be stripped in separately. Keylines may or may not print as desired.

2) In the Midwest, the entire hard mechanical.

➤ Since electronic mechanicals do not have tissue overlays to mark instructions, as did hard mechanicals, it is imperative to include a visual with an electronic mechanical and indicate whether any keylines print or are present to indicate position only.

Knockout *See* Reverse.

L

Lake In composition, an unwanted “lake-like” space. *See also* Gap and *see also* River.

Laser Dot The smallest addressable spot produced by a laser printer. *See also* Dot and *see also* Halftone.

A digital halftone dot is made up of many laser dots.

Laser Printer A desktop-printer which uses laser technology to transfer an image to the page. *See also* Wax Thermal Printer and *see also* Dye Sublimation Printer.

The term “laser printer” is often used as a generic term to cover printers using any one of several technologies such as laser, LED (laser emitting diode), dye sublimation, and wax thermal. These devices typically have a resolution of 300 to 600 DPI.

Laser Proof A concept proof made on a printer attached to a personal computer. *See also* Contract Proof and *see also* Color-Split Proof.

➤ Color laser proofs shown to clients should be marked to indicate that the are not an exact representation of the color of the final printed item. Among the reasons they usually are not an exact representation, is that many laser printers use colorants that are not representative of ink and that most laser printers represent spot colors by using process color (CMYK) dyes, waxes, etc.

Some people use a stamp indicating “Concept Proof, Not for Final Color”—this avoids unfulfilled client expectations.

Layers In page layout or illustration programs, transparent strata that can contain separate elements of a page or illustration. *See also* Alpha Channel.
Using layers allows for independent editing of the portions of the image on different strata (including transparency and opacity).

Line Art Copy of equal density of color throughout, without gradation of tone.
Line art can be reproduced by the offset process without being converted to a halftone. While printed line art will not contain printer's dots, the solid appearing areas will, if digitally produced, contain digital dots (e.g., 600 or more DPI—not visible to the naked eye).

Line Screen
In DTP, a measure of the lines of dots per inch used in offset printing to simulate continuous tone copy on the printed page (e.g., 85.133, 150, and 175 LPI) *See also* Halftone, and *see also* Lines Per Inch.

Lines-Per-Inch (LPI)
A numeric measure of the number of lines of dots-per-inch in a halftone, screen-tint, or process color separation. *See also* Dot, *see also* Halftone, and *see also* Resolution.
Lines-per-inch, abbreviated LPI, is not the same as dots-per-inch (DPI), which in digital imaging is a measure of the smallest unit that can be scanned, displayed or output. An electronically produced halftone dot can be made up of more than one digital dot.

Linked Graphics
A means of connecting graphics to the program in which they will be used without removing them from their initial location and placing or embedding a copy of the graphic in the application.
➤ If you move a linked graphic or change its name after linking, the DTP program the graphic was linked to will not be able to find it. Thus, the graphic will not appear on the imagesetter output. Be sure to relink graphics after any file moves or name changes.

Lino Film
Film negatives that have been output on a high-resolution Linotronic or compatible imaging device.
➤ If imagesetter produced film of a multi-colored job does not contain trapping; this process may not be able to be performed after the fact.

Lino Paper
See Resin-Coated Paper.

Linotronic™
A brand of imagesetter made by the Linotype–Hell Corporation.

Live Art
An indication on a visual accompanying a digital file that the file for the graphic so marked is to be used for output rather than being “for position only”.

Lossey Compression
Compressing an image or other file by sampling and discarding some information. *See also* Interpolation and *also* JPEG.

Losses
The minute shrinking of an image. *See also* Dot Gain.

Lossless Compression
Condensing an image or other file without loosing any information.

Low-End System
A DTP, scanning, or other system that provides only low-resolution images. *See also* High-End System.

Low Res.
See Low-Resolution.

Low-Res. Image File
A low-grade (low-resolution) image containing a relatively small amount of information. For example, either a low number of dots per inch such as a graphic made in a paint file format at 72 DPI, or a high-resolution image displayed in low-resolution to save time in monitor or printer rendering.

Low-Resolution
A coarse appearing image that lacks detail and clarity.
The curves in low-resolution images appear jagged. Jagged output is not a limit of the computer or the software but of the input and output devices (often 300 dpi). *See also* Resolution and *see also* High-Resolution.

LPI
See Lines-Per-Inch.

M

Magenta
One of the four colors used in process color printing to simulate all colors. Magenta reflects blue and red light.

Magpie™
An extension application for QuarkXpress that gathers the fonts, graphics, and document files to go to the printer.

Matchprint™
A 3M Company brand name for a laminated proof made from negative or positive film.
Matchprints can be made on the actual printing stock.

Mechanical — A collection of type, illustrations, and design elements in their proper page positions ready for the printer's camera. Also known as art board, boards, camera ready art, copy, and keylines. *See also* Electronic Mechanical.

Media — The material on which data is stored, for example, magnetic disk, magnetic tape, or optical disk.

Megabyte — A unit of measurement of memory equal to about one million bytes.

Microsoft Word™ — A word processing program for both the IBM PC and Mac platforms.

Midtone — The 25-to 35% tint areas in a halftone

Moiré — An undesirable screen pattern caused by one of several reasons. Early DTP separations were extremely susceptible to moires. *See* Calibration and *see* Color Management.

Monitor Calibration

N

Noise — In the PhotoShop image-editing program, an effect that generates desired, random, non-information bearing pixels in an image.

➤ Adding a small amount of noise to a Photoshop created blend can help in reducing the appearance of banding.

Native File Format — The default format in which a program saves files. This format may be a proprietary one; however, most programs can save data in a variety of formats including ASCII and PostScript. Also known as document format.

➤ DTP projects submitted in native file format could be edited or changed by the contractor if needed, in contrast to PostScript files that are not editable.

Nested Graphics — *See* Embedded Graphics.

O

Object Oriented Graphics — *See* Vector Graphics.

Open Prepress Interface (OPI) — A means to exchange information between various types and brands of desktop publishing and computer electronic prepress systems. *See also* Automatic Picture Replacement.

Operating System — A master computer program that controls a computer's functions and allows other applications and users to control the computer. Examples are MS-DOS, OS/2, HFS, and UNIX.

OPI — *See* Open Prepress Interface.

Optical Character Recognition — The process of scanning and digitizing text.

Originator Program — The computer program that the DTP component was produced in or in which it was originally digitized.

Orphan — *See* Widow.

Outline Font — A font that is stored as a mathematical formula of the outline of the character and scaled to output size at the time of output (screen or printer). Also known as a scalable font. *See also* Bitmapped Font.

PostScript and TrueType are outline fonts.

Output — The paper, film, or electronic file produced by electronic equipment such as image setters or scanners.

Output Device — Equipment, such as a laser printer, imagesetter, or film recorder that converts digital information into human readable form (paper, film, etc.).

Output Resolution — In DTP, a measure of the number of dots per inch placed by the writing engine in the laser printer or imagesetter (e.g., 300, 600, 2400 DPI.)

Over Sampling — In scanning, selecting information at a resolution beyond the recommended formula. *See also* Scanning.
Extra data left in the file will cause the output device to run slower with no increase in quality.

Overlap — The minor extension of an image in one color over the abutting image in another color. Overlapping is done to prevent unsightly gaps between the two printed images. *See also* Butt Fit and *see also* Trapping.

Overprint — Printing one color of ink over another. *See also Knockout.*

➤ Some page layout programs automatically knockout any color printing over another color, even black type printing over a light screen of a light color (e.g., a 10% screen of yellow). In a case such as this, (black over a light yellow screen) it is not necessary to knock the black out of the yellow, since black is opaque. In fact, reversing the black out of the yellow causes extra expense and the possibility of misregister. Programs should be checked for this feature and DTP projects adjusted accordingly.

Over Scanning — *See* Over Sampling

P

Page Assembly — *See* Page Layout.

Page Assembly Program — *See* Page Layout Program.

Page Description File — A file format used in the Adobe Acrobat, formatted-page viewing program.

Page Description Language (PDL) — A computer language that describes the geometry (format) of a page.
PDL's may be device independent such as PostScript or specific to certain hardware such as the Hewlett Packard company's PCL.

Page Layout — A process in which the elements of a publication, text, illustrations, and graphics are designed, placed, and otherwise prepared for printing.

Page Layout Program — A computer program that assists the user in preparing the digital equivalent of camera-ready copy—an electronic mechanical. *See also* Page Description Language.

In a page layout program—which is the basis of DTP—the results of word processing are coded for typesetting, the photography or other illustrations and graphics are sized and placed, and the publication is designed and made ready for output as paper or film on the printer or imagesetter. Some popular page layout programs are Aldus PageMaker, FrameMaker, QuarkXpress, and Ventura Publisher.

PageMaker™ — A page layout program developed by the Aldus Corporation.

Paint Program — A computer graphics program that produces bitmapped graphics as contrasted to an illustration program that produces object oriented graphics. Also known as a draw program.

Pantone Color™ — An ink color designated using the Pantone Matching System (PMS). *See also* Built Color and *see also* Spot Color.

The PMS ink color identification system contains over 1,000 different colors of ink each identified by a unique number. PMS colors are spot colors—use green ink if you want green—as opposed to built process colors, where screens of process yellow and process blue are used to simulate green.

Paste Board
In page layout programs, assembly surfaces like the board on which objects were pasted in conventional copy preparation.

PCL
Printer Command Language. A systematic means of communicating to a computer printer. *See also* PostScript.

PostScript and PCL (Hewlett Packard's Printer Command Language) are both printer command languages.

PDF File
See Page Description File.

PDL
See Page Description Language.

Pen Plotter
A computer “printer” that uses pens with colored ink.

Often a large format device. Frequently used for charts, maps and large posters.

➤ Plotter colors vary from brand to brand and even if available in process colors may not be a close match to printed process color. Plotter visuals should be marked to indicate they are for approximate color only if the final output is printed ink-on-paper. This will avoid unfulfilled customer expectations.

PFB File
Printer font binary file, the bitmapped, printer-font file for a PostScript font on an IBM PC or clone computer.

➤ PFB and PFM files for each font used in a DTP project are needed as part of the electronic mechanical for proper font output. PFB files are usually stored in the PSfonts directory.

PFM File
Printer font metrics file, the screen font file for a PostScript font on an IBM PC or clone computer.

➤ PFB and PFM files for each font used in a DTP project is needed as part of the electronic mechanical for proper font output. PFB files are usually stored in the PS Fonts/PFM subdirectory.

Photoshop™
A popular image editing program from the Adobe Corporation.

PICT
A low-resolution graphic file format designed for displaying object oriented graphics with Apple Macintosh computers. *See also* Image File Format.

➤ Graphics in PICT file format do not print well. It is suggested that they be converted to EPS or TIFF format before using them in DTP projects.

Pixel
Short for picture element. The smallest element that a monitor can display. *See also* Resolution.

Plain Paper Device
A printer that prints on plain paper (a laser printer) as opposed to an output device that puts an image on light-sensitive, resin-coated paper (an imagesetter).

➤ Plain paper device output is not suitable as camera-ready copy for many printing products including those with screens of one color that touch another color. Camera-ready copy prepared on a plain paper device should be carefully checked for image density, screen cleanliness, color overlap, registration, and other relevant items.

Platform
In all encompassing term for computer, operating system, and environment. For example, an IBM system, using DOS and running Windows.

Plotter
See Pen Plotter.

Plug-in
A program from a third party that adds functions to Illustrator or Photoshop.

Similar programs for QuarkXPress are known as XTensions.

PostScript™
A page description language from the Adobe Corporation. It is device independent and can be used by both DOS and Macintosh platforms. *See also* Encapsulated PostScript and *see also* PPD File.

PostScript™ File Format
Files from a DTP program that are in the PostScript “universal” page description language format rather than the program's native format.

PostScript™ Font
A Type font in the PostScript format. Also known as a Type 1 font. *See also* PFB File and *see also* PFM File.

PostScript™ Printer
A desktop (laser) printer that can output pages in the PostScript page description language.

PostScript capability is built into some printers and can be added to many others by font cartridge or software.

➤ DTP projects that are going to be output for printing on an imagesetter from electronic files, should be setup for, and checked by, the user on a PostScript printer, because PostScript output usually will not have the same text word-wrap and other layout as that shown with a desktop printer using it's own printer command language. Thus, using a non-PostScript device to print and check jobs that will be ultimately output on a PostScript imagesetter will often cause expensive, time-delaying surprises at the printing proof stage.

PPD File
PostScript printer description file. A text file specific to a printer or imagesetter model that speaks to it specifically, re: paper size, paper draw, printer resident fonts, memory, etc.

➤ While PostScript is described as a “Universal Page Description Language” and any PostScript compatible printer will output the data portion of the file, the first part of a PPD file provides brand and model specific information. Therefore, if you are producing a PostScript printer file and do not know the model and type of output device, the file should be made for a generic PostScript device such as the Linotronic 330, or even more generic, an Apple Laser Writer. However, these settings may not work exactly right on all machines so it is still recommended that you also include the original document files.

Pre-flight
The process of checking DTP files before output by the output provider, in order to check if the files will run successfully on the imagesetter.

In pre-flight, the files are not actually output on an imagesetter. Files may be opened and examined and/or run through a checking or imagesetter-emulation program.

Prepress
All of the preparation steps between mechanicals and the press, including camerawork or imagesetting, stripping, and plate making.

Prepress Bureau
A firm that provides prepress services to a customer or to the trade. *See also* Service Bureau.

Presentation Graphics
Graphics produced for the purpose of being presented at a business meeting as slides, on a computer monitor, or on a computer projection panel, rather than being used for ink-on-paper DTP purposes.

PressWise™
A pre-press industry imposition program from the Aldus Corporation.

Print-to-Disk
A command in a DTP program to send all the information that normally would go the printer to a computer file.

Print-to-Disk File
A file in the format required by a specific type of printer or imagesetter (a PRN file).

➤ Print to disk files, are generally not compatible with industry standard imagesetters, cannot be “tweaked” or edited, and will require new files to be submitted for any changes.

Printer Driver
A program that tells a computer how to communicate with a specific brand and model of printer.

Printer Font
A font required for printing, in contrast to a font used for displaying the information on a screen. *See also* Screen Font.
In the PC world this is a different font than the one needed for showing the character on the screen.

PRN File
See Print to Disk File.

Process Blue
See Cyan.

Process Color Separations — *See* Separations.

Program File Format — *See* Native File Format.

Program Version — A numbering system to keep track of successive releases of a software program.

Major releases are indicated by whole numbers (e.g., ver. 2.0 or 3.0). Minor intermediate updates are usually indicated by tenths (e.g., ver. 2.1 and 2.2), or even a lower case letter (e.g., 2.1 and 2.1a).

➤ While many upgrades are backwards compatible (can handle files made on earlier versions) a feature of a program important to your project may not be able to be correctly output by a later version, and usually will not be able to be handled by earlier versions. Thus it is imperative that you provide information on the versions of all programs used in preparing projects submitted as electronic mechanicals (use GPO Form 952). Not providing this information, or providing it after the fact often causes delays and additional costs.

Q

QuarkXPress™ — A page layout program developed by Quark Inc. that is popular with many graphic designers.

This program originated in the Macintosh environment but is now also available for PC's.

R

RAM — Random Access Memory. The portion of the computer's storage memory that can be used non-sequentially.

It is usually that part of memory available for program operation and thus is generally the factor that limits the complexity of work a computer can do. Most DTP programs, especially graphics are RAM intensive.

Raster Image — *See* Bitmap and *see* Bitmapped Image.

Raster Image Processor (RIP) — A device that converts information in microcomputer files (application programs and PostScript or other page description language) into an electronic array of dots that a Color Electronic Prepress System (CEPS) can use for manipulation or an imagesetter is capable of outputting onto film or paper.

➤ RIP time is a billable element of imagesetting. Improper or inefficient page layout work such as cropping graphics by hiding portions with white boxes will cause extra RIP time and probably additional charges.

RC Paper — *See* Resin Coated Paper.

Reflective Art — Atwork such as graphics and photoprints that are viewed by reflective light in contrast to transparencies or digital art.
Reflective art can be made into negatives with a graphic arts camera or digitized by a scanner and then made into negatives with an imagesetter.

Removable Hard Drive — A computer hard-drive storage device whose information storage disk can removed from the computer and replaced with additional disk cartridges to provide supplementary storage, or used as a means to transfer copies of large data files. *See also* Hard Drive.

Removable hard drives may be optical, magnetic, or a combination of both. One type of popular removable magnetic hard drive used in DTP was developed by the Syquest Corporation, but is now licensed for production and distribution under many other company names.

Resampling — The addition or removal of pixels in an image by the process of interpolation in order to change the images resolution or size. *See also* Resizing.

Rescaling — *See* Resizing.

Resin Coated Paper — 1) Paper for an imagesetter that is coated with chemicals to make it very smooth and capable of showing very precise images.

2) Camera-ready copy on resin coated paper that has been output by a high-resolution imaging device (e.g., a Linotronic imagesetter or compatible) in contrast to the output of a plain paper (laser) printer.

Resizing — Changing the size of an image (rescaling) where the actual pixel count does not change, and the pixels just get smaller and closer together or larger and further apart. *See also* Resampling.

Resolution — A measure of image sharpness in either a monitor or printout usually measured in dots per inch (DPI). Typical resolutions are monitors, 72 DPI; dot matrix printers, 120 DPI; laser printers, 300 or 600 DPI; imagesetters, 1,200, 2,400, or 3,600 DPI.

Resolution Dependent Font — *See* Bitmapped Font.

Resolution Independent Font — *See* Scalable Font.

Return — Short for “carriage return” used as an end of line indicator in a word processing file.

Rev. — Abbreviation for revision. *See* Program Version.

Reverse — In graphic arts, type or a graphic that is not printed itself, but is defined by the ink surrounding it, thus allowing the underlying paper or ink to form the image. Also known as a reverse. Also known as a knockout.

➤ The black area (the surround) for any knockout made on a laser printer and submitted as camera-ready/scanner-ready copy should be checked for even darkness before submitting it. Any unevenness Seen with the naked eye will be magnified by the camera or scanner and thus will not print well**.**

RGB — Red, Green, and Blue, the colors used in a computer monitor, as opposed to cyan, yellow, magenta, and black (CMYK) used in printing inks—the printing industry uses K for black to keep from confusing it with B for blue. *See also* CMYK.

RIP — *See* Raster Image Processor.

River — In composition, a series of spaces between words in successive lines of type that appears like a “river” of white space.

Rosette — A desired screen pattern made by the screens used for process color. *See also* Moiré.

Rotate — The process of electronically turning a graphic.

➤ Rotation of graphics should be done in the initial program in which the graphic was produced or scanned. Rotation of a graphic in a page layout program will cause the raster image processor to have to process the graphic twice (straight and rotated) requiring extra time and probably extra cost.

S

Sampling — In scanning, the process of selecting the amount of data needed for the scanning resolution requested. *See also* Over Sampling.

Scalable Font — A font in vector format (in contrast to bitmap format) that can be resized and output without distortion. Also known as an outline font.

TrueType and PostScript Type 1 fonts are outline fonts.

Scaling — In copy preparation, the process of determining the percentage of enlargement or reduction of an image.

Scan

1) (noun) A graphic or text that has been converted into digital data by a scanner.

2) (verb) To look at hard-copy text or graphics with an electronic device and convert the image into digital data.

Scanner

A device that converts an image into digital data that can be manipulated and stored on a computer.

Scanners can be used for line or halftone originals and with appropriate software for optical character recognition.

Scanning

The process of converting a two dimensional image into digital data that can be manipulated and stored on a computer. *See also* Sampling.

➤ Continuous tone graphics being converted to halftones, should be scanned at a resolution between 1.5 and 2 times the line screen to be used (according to the quality required), multiplied by the % of enlargement or reduction of the graphic being scanned. For example, scanning a 4"x5" b/w photoprint to be used at 8"x10", printed using a 150 line per inch screen:

2(quality factor) x 150(line screen) x 2(enlargement) =

650 DPI (input resolution.)

Scanning at a higher resolution results in a waste of time and possibly money (extra RIP time).

Screen

1) (verb) To convert a continuos tone photoprint or other image into a halftone.

2) (noun) The viewing surface of a computer monitor.

3) (noun) An area where dots of an ink color (a percentage) rather than solid ink coverage is used to simulate a lighter shade of the color of ink used.

➤ When preparing camera-ready copy containing screens on a laser printer, the affect of dot gain on screens must be considered.

Screen Angle

The angle between the rows of dots used to make screen tints of two or more colors.

➤ If the proper angles are not achieved, an unwanted moiré pattern will appear. This is one of the printing limitations that must be kept in mind when using DTP to produce publications that will print in process color.

Screen Build

In ink color that has been simulated by using tints of two or more process ink colors. For example, a green simulated by using %s of process yellow and process blue (cyan). *See also* Spot Color.

➤ Some Pantone Colors cannot be closely simulated by using screen builds. It is best to pick colors from a chart or system that can be reproduced with screen builds, or to show clients samples of printed screen builds to avoid unfulfilled expectations.

Screen Frequency

An alternative term for lines per inch and line screen.

Screen Font

An application or system specific screen representation of the printed typeface. *See also* Bitmapped Font and *see also* Printer Font.

Self Extracting Archive

A compressed file that can be expanded by itself without requiring the user to have a copy of the compression program used. *See also* Compression.

➤ DTP files that will be submitted in a compressed format should be made into self-extracting archives to assist in decompression.

Separations

1.) A set of film negatives or positives showing the relative density value of the image in one of the four process colors (cyan, magenta, yellow, and black) that can be used to simulate other colors and full color images. *See also* Screen Build.

Also known as color separations, process color separations, or seps.

2.) Used by some people for a set of films, each showing the image printing in one of the spot colors used in a job.

Service Bureau

An organization that takes digital information from clients (disks or files via modem) and operates an imagesetter to output the data as paper or film. *See also* Prepress Bureau.

Some service bureaus also provide design and some provide a variety of prepress services beside imagesetting.

Shadow

The darkest part of the image. *See also* Highlight and *see also* Tone Compression.

➤ Shadows in scanned halftones should be adjusted in a image editing program based on a number of factors including printing process and paper to be used. Typical densities are: for coated litho paper on sheet fed presses, 90 to 95%; for uncoated litho stock, 85-90%; and for newsprint on web presses, 70-85%.

Skinnies

See Choke.

Software

A set of instructions that tells a computer how to operate (e.g. the operating program for PC's or the system software for Mac's) the instructions to perform a specific task such as word processing (an application program.)

Spot Color

An ink color designated by the Pantone or similar system, where the ink used is the actual color desired (e.g., green ink rather than process yellow and process blue to simulate green.) *See also* Built Color.

Spread

1.) In prepress the process of minutely expanding a colored image so that it overlaps an abutting image in another color to avoid gaps between them in the printed product. *See also* Choke and *see also* Trapping.

2.) In publication layout, two or more contiguous pages that contain one continuing article. (E.g., 3 and 4.)

Stair Stepping

See Banding.

Stat Camera

In-office cameras used to make inexpensive high-contrast copies of line or halftone reflective-art.

Stripping

The prepress process of assembling negatives on a carrier sheet so that they appear on the proper printing plate in the proper color and position. Also known as image assembly. *See also* Imposition.

Stroke

A line generated in a DTP drawing program.

Many DTP programs use strokes for trapping.

Stuffit™

A popular compression program for the Macintosh environment.

Style Linked Font

A font with an attribute such as bold or italic that is done by linking characters in a “normal” font with the attribute in a style menu to achieve the look on the monitor of a true bold or italic font.

➤ Style linked fonts do not generally hold their links for the Macintosh platform and true bold or italic fonts should be used. Use actual bold, italic, etc., fonts.

Style Sheet

A group of formats (typeface, size, style, etc.) for various text elements (headline, body copy, captions, etc.) that can be applied to copy rather than having to set each style individually.

* ➤ Authors should be cautioned that extensive text styling done in a word processor may not readily transfer over to a page layout program and may even have to be removed before the designer can set the text in the page layout program.

Subtractive Primary Color
The colors of cyan, magenta, and yellow used for reflective light as in photographic prints and printing. *See also* Additive Primary Colors. Putting these colors together should produce black, however since the colorants used are not pure, black is needed. Thus process color printing uses cyan, magenta, yellow, and black.

Suitcase™
1) A Macintosh platform font management utility (from 5th Generation Software) so named because Apple computers use a suitcase as an icon to identify screen fonts. A similar program for DOS is Adobe Type Manager (ATM) or Fontminder.

2) A term used in the Macintosh environment to describe a collection of resources stored in a special file that uses a suitcase as an icon.

Syquest™ Removable Drive and Cartridge
A popular type of removable hard drive available for both DOS and Mac platforms. Syquest type drives and cartridges are now available under several other brand names.

T

Tagged Image File Format (TIFF)
A graphic file format used to describe bitmapped files especially scanned graphic images. TIFF files are used in both Mac and PC environments. In the PC environment the file extension is .TIF.

➤ TIFF is one of the bitmapped file formats of choice for most DTP users.

Thermal Dye (or Wax) Sublimation Printer
A printer which uses heat to vaporize dyes (or waxes) in order to form an image.

See also Concept Proof and *see also* Laser Printer.

TIF
See Tagged Image File Format.

TIFF
See Tagged Image File Format.

Tiling
Breaking an oversized image into sections (like side-by-side floor tiles) so it can be shown on a monitor or output on a printer or imagesetter.

Tint
A printed area that appears to be a lighter color of the ink used, but which is produced by printing solid-colored dots of the ink rather than a solid block of a lighter color—larger dots for darker tones and smaller dots for lighter colors. Also known as screen tint or percentage.

The eye sees the dots and the surrounding white space as a lighter tone of the solid color.

Tone Compression
Adjusting the range of density of an image to compensate for the limited range of density in a printed halftone, in contrast to the range of the original subject, photoprint, transparency, monitor image, or digital file. *See also* Highlight and *see also* Shadow.

Tracking
Adjusting the spacing between letters. *See also* Kerning.

➤ When submitting DTP projects, if any tracking or kerning is done to a font be sure to also submit any ancillary font files in which your program keeps this information.

Trap
The tiny bit of overlap of different colors used to avoid minute white spaces between adjacent printed colors that should butt but do not, due to paper stretch or mechanical shifting.

Trapping

The intentional slight overlapping of two adjacent images (that will print in different colors). *See also* Choke and *see also* Spread.

Trapping is done in order to avoid a paper-colored gap (caused by a registration shift) between the images during printing.

➤ The need for trapping is one of the printing limitations that must be kept in mind when using DTP to produce publications that will print in color. This prepress technique is available in a few DTP programs, however, its use is dependent on a number of printing variables including, ink colors, paper, press type (web or sheet fed), and company and specific press capabilities. Thus DTP users should not use it without extensive knowledge and consultation with GPO and/or the printer.

TrapWise™

An Aldus Corporation, industrial strength, pre-press program for trapping.

TrueType™ Font

A system of outline fonts, established by Apple and Microsoft, that are scalable and can be displayed or printed at a variety of sizes. *See also* .TTF and *see also* .FOT

➤ TrueType fonts while very popular in the business office environment are not as prevalent in professional imagesetting service bureaus.

TruMatch™

A proprietary printing color identification system based on screen builds of process colors rather than trying to simulate spot colors with screen builds of process colors. *See also* Built Color and *see also* Spot Color.

TTF File

A TrueType font file on an IBM PC or clone computer. *See also* FOT File.

TTF and FOT files for each TrueType font used in a DTP project are needed as part of the electronic mechanical for proper font output. TTF and FOT files are stored in the Windows/system subdirectory.

➤ While a TTF file is both the screen and printer font, the respective FOT file is needed to provide hinting for proper printing.

Type 1 or 3 Font

PostScript Level (version) 1 or 3 font. *See also* PostScript Font.

Typography

The process of setting and arranging type.

U

UCR

See Under Color Removal.

Under Color Removal (UCR)

The reduction of the three colors (Cyan, Magenta, and Yellow) used in process color printing to allow for better laydown of the black ink used on top of them (for color shift neutralization or providing details.) *See also* Grey Component Replacement.

➤ This pre-press technique is available in a number of DTP programs. However, its use is dependent on a number of printing variables including, paper, press type (web or sheet fed), and company and specific press capabilities. Thus DTP users should not use it without extensive knowledge and consultation with GPO and/or the printer.

Underlap

See Choke.

UNIX™

A very powerful, multi-tasking, multi-platform, operating system.

➤ Only a limited number of DTP programs are available in UNIX and the number of printers and service bureaus that can handle DTP projects done in UNIX are limited.

V

Vector Graphics — Computer graphics that are produced by defining a series of lines on an x-y axis as opposed to an image made up of a grid of dots (a bit mapped image). Vector images may not be as precise as bit mapped images, but use much less computer memory. Also known as object oriented graphics. *See also* Bit Map and *see also* Bitmapped Graphics.

Ventura™ — *See* Ventura Publisher.

Ventura Publisher™ — A page layout program (primarily used on IBM and compatible platforms) developed by the Xerox Corporation and now distributed by the Corel corporation as Corel Ventura.

Visual — *See* Concept Proof. Also known as hard copy.
See also Color-Split Proof and *see also* Composite Proof.

W

Wax Thermal Printer — *See* Dye Sublimation Printer.

Widow — In composition, a column-starting line of type containing only a word or part of a word.

Used synonymously with “orphan” by many, while others differentiate slightly between the two terms.

Windows — A graphic user interface (GUI) for personal computers using DOS as an operating system.

WMF — Windows metafile graphics format. A low-resolution bitmapped graphic formats for the Windows interface.

Word™ — Short for Microsoft word a popular word processing program. *See also* Word Processing Program

Word Perfect™ — A popular word processing program. *See also* Word Processing Program

Word Processing Program — A computer program for creating and editing documents. Examples are Microsoft Word and WordPerfect

➤ Contemporary word processing programs have increasing sophistication in editing. Yet they should only be used to prepare text for a desktop publishing layout programs not to completely prepare (layout) documents bound for commercial printing. Most word processing programs do not have the capability to produce the type of files needed for DTP; for example; files that can be color separated or capabilities for high quality graphics.

Win.ini — A file in the Windows environment that controls a number of the parameters in Windows.

Writing Engine — The part of a laser printer or imagesetter that puts the characters on the paper or film.

WYSIWYG — An acronym for “What you see is what you get” which is what many people think they will get from DTP. *See also* WYSMNBWYG.

WYSMNBWYG — An acronym for “What you see may not be what you get” which most often is the case with DTP. *See also* WYSIWYG.

X-Y-Z

XPress — *See* QuarkXPress.

XTension — A small add on application (from a third party vendor) that adds a function to QuarkXPress—known as an addition in PageMaker and as a plug-in for Photoshop or Illustrator.

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